

REMARKS

The Examiner is respectfully requested to enter the foregoing amendment prior to examination of the above-identified patent application.

By this Preliminary Amendment, claims 7, 15, 23, 31, 39, 47, 50, 53, 56, 59 and 62-71 are amended. The amendments to the claims do not narrow the scope of the claims, but merely clarify terminology and the features of the claims as previously recited. No new matter has been added.

The final Office Action dated August 16, 2004, included the following objections and rejections to which the Applicants herein respond.

The drawings were objected to under 37 C.F.R. § 1.83(a) as not showing an object data recording zone. The Office Action took the position that the phrase "object data recording zone" is not in the specification. The Applicants have amended the claims to recite a video data recording area, which is disclosed on at least page 17, lines 4-9 of the specification.

The Office Action objected to the Amendment under 35 U.S.C. § 132 as introducing new matter. In particular, the Office Action took the position that the "object data recording zone" and the "management data recording zone" are not disclosed or suggested in the application as originally filed. The Applicants have amended the claims by changing terminology. The "object data recording zone" has been rephrased as a "video data recording area" and the "management data recording zone" has been rephrased as a video manager recording area, which are disclosed on at least page on page 16, line 24 to page 17, line 13 of the specification as originally filed.

Claims 7-71 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. This rejection is related to the above-noted objection to the drawings with respect to the object data recording zone and management data recording zone. The Applicants submit that the amendments to the claims overcome this rejection.

Claims 23-30 and 39-46 were rejected under 35 U.S.C. § 102(e) as being anticipated by Aoki et al. (U.S. Patent No. 6,243,220 B1, "Aoki"). Claims 24-30 and 64 depend from claim 23, and claims 40-46 and 66 depend from claim 39.

Aoki discloses an audio mode information signal input 6 containing an audio mode control signal of the audio signal input supplied to an audio mode information signal processing circuit 10 together with record channel information 36 where the audio modes of the respective channels (for example, monaural, two-language/multi-language, stereo 2-channel, stereo 4-channel or a combination thereof) is encoded and is supplied to the ID/sub-code insertion circuits 11 and 12 and an audio mode display unit 29.

With respect to claims 23 and 39, the Applicants respectfully submit that Aoki fails to disclose or suggest the claimed features of the invention. Claim 23 recites "a video data recording area in which an audio stream containing the audio data is recorded" and that "control information includes application information indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes

as one stream.” Claim 39 recites “a video data recording area in which an audio stream containing the audio data is recorded” and that “control information includes application information indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes”. In contrast, Aoki discloses an audio mode control signal (“001000”) indicating that the four audio channels contain a two language (multiplexed audio) broadcast and a stereo (multi-channel) broadcast. Aoki does not disclose application information indicating whether one stream contains audio modes which are different from each other. Specifically, Aoki does not disclose the information indicating that the audio modes included in one stream become different from each other due to the passage of time. As such, Aoki does not disclose or suggest the features of the invention, as recited in claims 23 and 39.

According to U.S. patent practice, a reference must teach every element of a claim in order to properly anticipate the claim under 35 U.S.C. §102. In addition, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628,631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “Every element of the claimed invention must be arranged as in the claim. . . the identical invention, specifically, [t]he identical invention must be shown in as complete detail as contained in the claim.” Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989) (emphasis added). The Applicants respectfully submit that Aoki does not disclose or suggest control information including application information

indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes as one stream as arranged in claim 23; or control information including application information indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes, as arranged in claim 39. Accordingly, Aoki does not anticipate claims 23-30 and 39-46, nor are claims 23-30 and 39-46, obvious in view of Aoki.

Claims 7-22 and 31-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoki in view of Yagi et al. (U.S. Patent No. 6,253,021 B1, "Yagi"). Claims 8-14 and 62 depend from claim 7, claims 16-22 and 63 depend from claim 15, and claims 32-38 and 65 depend from claim 31. Aoki was cited for disclosing many of the claimed elements of the invention with the exception of the disc-shaped recording medium. Yagi was cited for curing this deficiency.

Yagi discloses a recordable optical disc that stores one or more video objects. A video stream, a first audio stream, and a second audio stream that is used for dubbing are multiplexed into each video object.

As discussed above with respect to claims 23 and 39, Aoki fails to disclose or suggest "a video data recording area in which an audio stream containing the audio data is recorded" and that "control information includes application information indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes." Similarly, claims 7 and 15 recite control information including "application information indicating whether or not the audio stream recorded in

the video data recording area contains audio data intermingled from different recording modes as one stream.” Claim 31 recites a method of recording audio data on a disc-shaped recording medium comprising the step of “generating control information including application information indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes.” In contrast, as discussed above with respect to claims 23 and 39, Aoki discloses an audio mode control signal (“001000”) indicating that the four audio channels contain a two language (multiplexed audio) broadcast and a stereo (multi-channel) broadcast. Aoki does not disclose application information indicating whether one stream contains audio modes which are different from each other. Specifically, Aoki does not disclose the information indicating that the audio modes included in one stream become different from each other due to the passage of time. Yagi fails to cure the deficiencies in Aoki, as Yagi also does not disclose or suggest application information indicating whether one stream contains the audio modes which are different from each other.

Claims 47-61 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoki and Yagi as applied to claims 23-30 and 39-46 above, and further in view of Oguro (U.S. Patent No. 6,097,558). Claims 48 and 49 depend from claim 47, claims 51 and 52 depend from claim 50, claims 54 and 55 depend from claim 53, claims 57 and 58 depend from claim 56, and claims 60 and 61 depend from claim 59. Aoki and Yagi were cited for disclosing many of

the claimed elements of the invention with the exception of a mixed mode flag. Oguro was cited for curing this deficiency.

Oguro discloses a MIX (1 bit) which represents whether or not composite audio data that composites each component is present. When MIX is "0", MIX represents that composite audio data is present. When MIX is "1", MIX represents that the composite audio data is not present. MIX is valid only when CH=011. When CH \neq 011, MIX should be 1.

Claims 47, 50, 53, 56, and 59 recite that control information includes a "mixed mode flag." The Applicants submit that the combination of Aoki, Yagi and Oguro fail to disclose or suggest at least this claimed feature of the invention. The mixed mode flag of the present invention indicates whether the multiplexed audio, multi-channel audio, and monaural audio are mixed, in which a flag is "1" in the case of the mixed, and "0" in the case of the non-mixed. In contrast, Oguro discloses eight-channel audio which are made by six-channel surround audio and two-channel stereo audio as composite audio data. The "MIX" of Oguro represents whether or not the composite audio data that composites each component is present. When MIX is "0", it represents that the composite audio data is present, while when MIX is "1", it represents that the composite audio data is not present. That is, Oguro discloses only multi channels, but does not disclose multiplexed audio. Thus, the "MIX" disclose by Oguro is not comparable to the "mixed mode flag" of the present invention as recited in claims 47, 50, 53, 56, and 59.

Claims 62-71 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoki, Yagi and Oguro as applied to claims 7-61 above. Each of claims 62-71 recites "a video manager recording area is located inward of the video data recording area". The Office Action took the position that there are several zones disclosed in Oguro, and inherently, some control areas are located inward of other control areas. Although the Office Action has pointed to zones 3, 4 and 5 in Oguro, it appears that the Office Action is referring instead to Yagi. Fig. 3A of Yagi discloses zones 0-23. However, as discussed above, the combination of Aoki, Yagi, and Oguro do not disclose or suggest the features of the invention as recited in claims 7, 15, 23, 31, 39, 47, 50, 53, 56 and 59, from which claims 62-71, respectively, depend. Therefore, the Applicants respectfully submit that claims 62-71 are allowable based on their dependency from allowable base claims 7, 15, 23, 31, 39, 47, 50, 53, 56 and 59.

Under U.S. patent practice, the PTO has the burden under §103 to establish a prima facie case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to

establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure.

For at least the combination of foregoing reasons the Applicants respectfully submit that the combination of Aoki, Yagi and Oguro fails to disclose or suggest the present invention as claimed in claims 7-22, 31-38, and 47-71 therefore, the Office Action has not set forth a *prima facie* case of obviousness for purposes of a rejection of claims 7-22, 31-38, and 47-71 under 35 U.S.C. §103.

Claims 8-14 and 62 depend from claim 7, claims 16-22 and 63 depend from claim 15, claims 24-30 and 64 depend from claim 23, claims 32-38 and 65 depend from claim 31, claims 40-46 and 66 depend from claim 39, claims 48, 49 and 67 depend from claim 47, claims 51, 52 and 68 depend from claim 50, claims 54, 55 and 69 depend from claim 53, claims 57, 58 and 70 depend from claim 56, and claims 60, 61 and 71 depend from claim 59. The Applicants respectfully submit that these dependent claims are allowable at least because of their dependency from allowable base claims 7, 15, 23, 31, 39, 47, 50, 53, 56,

and 59. Accordingly, the Applicants respectfully request allowance of claims 7-71 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 107156-09071.**

Respectfully submitted,



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Enclosure: Request for Continued Examination